U.S. Application No.: 09/810,216

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A method of optimizing speech quality in a mobile radio system by using when possible a tandem free operation mode for a mobile-to-mobile call, the method comprising:

selecting a first coding mode;

if said first coding mode is not compatible with said tandem free operation mode, changing said first coding mode to a second coding mode which is compatible with said tandem free operation mode; and

using said tandem free operation mode with said second coding mode.

2. (Currently Amended) A method of optimizing speech quality in a mobile radio system by using when possible a tandem free operation mode for a mobile-to-mobile call, the method comprising:

selecting a first coding mode;

if when said first coding mode is not compatible with said tandem free operation mode, changing said first coding mode to a second coding mode which is compatible with said tandem free operation mode;

signaling said first <u>coding mode</u> or <u>when said first coding mode is changed to said second</u> coding mode, <u>signaling said second coding mode</u>, for each of said mobiles;

selecting a common coding mode for tandem free operation based on said signaled coding modes for each of said mobiles;

using said tandem free operation mode with said selected common coding mode.

Attorney Docket No.: Q63628

Amendment Under 37 C.F.R. § 1.116 U.S. Application No.: 09/810,216

3. (Previously Presented) The method claimed in claim 2, wherein if said signaled coding modes match, said coding modes constitute said common coding mode for said tandem free operation mode.

4. (Previously Presented) The method claimed in claim 2, wherein if said signaled coding modes do not match, selecting a common coding mode for said tandem free operation mode based on lists of supported coding modes, for each of said mobiles,

wherein at least one of said lists does not include any coding mode that is not compatible with said tandem free operation mode.

- 5. (Previously Presented) The method claimed in claim 2, wherein said system is Global System for Mobile Communication.
- 6. (Previously Presented) The method claimed in claim 2, wherein one coding mode that is not compatible with said tandem free operation mode is an adaptive coding mode.
- 7. (Previously Presented) The method claimed in claim 6, wherein one said adaptive coding mode is Adaptive Multirate coding mode.
- 8. (Previously Presented) The method claimed in claim 2, wherein one coding mode that is compatible with said tandem free operation mode is a full rate mode.
- 9. (Previously Presented) The method claimed in claim 2, wherein one coding mode that is compatible with said tandem free operation mode is an enhanced full rate mode.
- 10. (Previously Presented) The method claimed in claim 2, wherein one coding mode that is compatible with said tandem free operation mode is a half rate mode.

U.S. Application No.: 09/810,216

11. (Previously Presented) A mobile radio system for optimizing speech quality in a mobile radio system by using when possible a tandem free operation mode for a mobile-to-mobile call, said system comprising:

means for initially selecting a first coding mode;

means for replacing said first coding mode if said first coding mode is not compatible with said tandem free operation mode, to a second coding mode which is compatible with said tandem free operation mode, and

means for using said tandem free operation mode with said second coding mode.

12. (Previously Presented) A mobile radio system for optimizing speech quality in a mobile radio system by using if possible a tandem free operation mode for a mobile-to-mobile call, said system comprising:

means for initially selecting a first coding mode;

means for replacing said first coding mode if said first coding mode is not compatible with said tandem free operation mode, to a second coding mode which is compatible with said tandem free operation mode, and

means for signaling said first or second coding mode for each of said mobiles;
means for selecting a common coding mode for tandem free operation based on said
signaled coding modes for each of said mobiles,

means for using said tandem free operation mode with said selected common coding mode.

13. (Previously Presented) The system claimed in claim 12, wherein if said initially selected coding modes for each of said mobiles match, said coding modes comprise said common coding mode for said tandem free operation mode.

U.S. Application No.: 09/810,216

14. (Previously Presented) The system claimed in claim 12, further comprising:

means for selecting a common coding mode for said tandem free operation mode when said initially selected coding modes for each of said mobiles do not match, wherein said selection is based on lists of supported coding modes, for each of said mobiles, and at least one of said lists does not comprise any coding mode that is not compatible with said tandem free operation mode.

- 15. (Previously Presented) The system claimed in claim 12, wherein said system is a Global System for Mobile Communication.
- 16. (Previously Presented) The system claimed in claim 12, wherein one coding mode that is not compatible with said tandem free operation mode is an adaptive coding mode.
- 17. (Previously Presented) The system claimed in claim 16, wherein one said adaptive coding mode is Adaptive Multirate coding mode.
- 18. (Previously Presented) The system claimed in claim 12, wherein one coding mode that is compatible with said tandem free operation mode is a full rate mode.
- 19. (Previously Presented) The system claimed in claim 12, wherein one coding mode that is compatible with said tandem free operation mode is an enhanced full rate mode.
- 20. (Previously Presented) The system claimed in claim 12, wherein one coding mode that is compatible with said tandem free operation mode is a half rate mode.
- 21. (Previously Presented) An entity for a mobile radio system, comprising: means for selecting a first coding mode for a mobile-to-mobile call,

U.S. Application No.: 09/810,216

means for, if said first coding mode is not compatible with a tandem free operation mode, changing said first coding mode to a second coding mode which is compatible with said tandem free operation mode, means for using said tandem free operation with said second coding mode.

22. (Previously Presented) An entity for a mobile radio system, comprising:

means for selecting a first coding mode for a mobile for a mobile-to-mobile call,
means for, if said first coding mode is not compatible with a tandem free operation mode,
changing said first coding mode to a second coding mode which is compatible with said tandem
free operation mode,

means for initiating a negotiation for selecting a common coding mode for said tandem free operation, with said second coding mode.

23. (Previously Presented) The entity according to claim 22, further comprising:

means for implementing codec mismatch resolution, using a list of supported coding modes, which does not comprise any coding mode that is not compatible with said tandem free operation mode.